

February 25, 2022

The Honorable Jocelyn G. Boyd  
Chief Clerk/Executive Director  
Public Service Commission of South Carolina  
101 Executive Center Drive  
Columbia, South Carolina 29210

RE: Docket No. 2021-307-E, Petition to Review Grid Reliability/Stability Proposal

Dear Ms. Boyd

This will record the response of the Petitioner regarding the Docket No. 2021-307-E to the letter filed by the Southern Environmental Law Center dated February,21 by Kate Mixson.

In their letter, the Southern Environmental Law Center had declared that the Petition had no merit on the basis of violating existing laws and regulations. The basis for that conclusion referenced statutes allowing any Solar energy producer to have the right to connect to the grid that exists in South Carolina and the utilities must buy that energy at the same rate as the utility charges its customers.

Please allow me to correct the misconception that the referenced Petition does not allow the connection of all the roof-top solar panel homeowners to the grid. The Petition explicitly through its illustration and descriptive words allows those homeowners to connect to the grid so that the unreliable, intermittent, and uncontrollable solar generated electric energy can be compensated when shortfalls occur for it to meet the demands for electrical energy. What the Petition calls for is just a one-way flow of energy from the grid energy to the homeowner circuit as any other household connected to the grid gets served by the utility.

The Petition takes that position that may be contrary to the enacted laws and/or statutes in preventing the flow of electrical energy from ever-growing hundreds of thousands of retail roof-top solar generators affecting the stability of the supply side of the grid. That is because it is a well-established physical nature of the solar energy generation characteristics which are unreliable, intermittent, and uncontrollable and if those characteristics are imposed on the supply sides of the grid at hundreds of thousands of retail locations it will most definitely destabilize the grid management. That difficulty in grid management will continue to get worse as more and more of those retail installation come on board. That statement is not a speculation but a reality, notwithstanding the government statues and laws ignoring it. Perhaps, those laws and statutes were enacted at a time when the consequence to the grid management was either underestimated or thought not serious enough to cause any potential

grid failure issues. In the wake of the Texas grid failure of 2021 during the unusually cold spell when the windmills (with installed capacity of about 20% of grid supply side energy) froze and became inactive, the grid management failed that resulted in loss of lives and enormous property damage. The Petitioner does not think we need to confirm that reality at a future date in South Carolina. The Petition seeks to remove that risk by seeking to make the rooftop solar installations self-sufficient in meeting the electrical energy demands of those installations. If all those hundreds of thousands of roof-top solar installations were to be self-sufficient, the grid can shed all those aggregate supply and can flatten or minimize the growth of the grid supply needs and newer utility type generating stations.

The owners of those roof-top solar installations would not have to depend on the grid and enjoy meeting their electrical energy needs without having to pay any electrical bills. Since they have the capability to draw electrical energy when forced to do so due to failure of their own installations, they would have the assurance of a reliable grid supply as a backup.

The arrangement as described in the Petition will lead to better environmental outcome as all those hundreds of thousands of self-sufficient solar-roof top installations would entirely depend on renewable source.

The laws and statutes are not cast in concrete. As we gain more information and experience, our prudence will require us to re-evaluate those positions and adjust them accordingly. Persisting in the path that leads to serious grid reliability problems with potentially damaging consequences is not appropriate. The Petitioner respectfully disagrees with the position taken by the Southern Environmental Law Center.

Thank you for allowing me to file this response in the official proceedings concerning the referenced Docket.

Respectfully submitted,

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